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## GLASGOW COMA SCALE OPERATIONAL DEFINITIONS

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### EYE OPENING

**Spontaneous:** Eye opening is spontaneous if the patient's eyes are already open at the time of the assessment with no stimulation other than that of the existing ambient environment. The patient can close his eyes to command. This eye opening response implies an intact reticular activating mechanism and a functioning arousal mechanism.

**To Voice:** If the patient's eyes are not open at the time of the assessment, a response to voice is present if the eyes open when the patient's name is spoken or shouted.

**To Pain:** If verbal stimulation is unsuccessful in eliciting eye opening, a response to pain is present if the eyes open when a standard pain stimulus is applied.

**None:** No eye response is present if the above attempts at stimulation are unsuccessful.

### BEST VERBAL RESPONSE

**Oriented:** After being aroused, the patient is asked name, place and date. The patient is oriented if the answers given are correct.

**Confused:** The patient is confused if the individual cannot answer the questions regarding, name, place and date accurately, but is still capable of producing phrases, sentences or conversation exchanges.

**Inappropriate:** In this state, the patient cannot produce phrases, sentences or conversational exchanges, but can produce an intact word or two. These words may be electable only in response to physical stimulation and may frequently be obscenities or relative's names.

**Incomprehensible:** In this state, the patient can produce groans, moans or unintelligible mumblings, but cannot produce an intact word in response to stimulation.

**None:** In this state, the patient does not respond with any phonation to any stimulation no matter how prolonged or repeated.

## **BEST MOTOR RESPONSE**

**Obedient:** In response to instructions, whether verbal or written, or through gestures, patient shows ability to comprehend the instruction and to physically execute it. A common example is the command to hold up two fingers.

**Purposeful:** When a standard painful stimulus is applied, the patient may move limb or body away from stimulus in a purposeful manner or attempt to push stimulus away.

**Withdrawal:** If the patient does not obey commands, the standard pain stimulus is applied. Withdrawal is present if 1) the elbow flexes, 2) the movement is rapid, 3) there is no muscle stiffness and 4) the arm is drawn away from the trunk.

**Flexion:** Flexion is present if 1) the elbow flexes, 2) the movement is slow, 3) muscle stiffness is present, 4) the forearm and hand are held against the body and 4) the limbs hold a hemiplegic position.

**Extension:** Extension is present if 1) the legs and arms extend, 2) muscle stiffness is present and 3) external rotation of the shoulder and forearm occurs.

**None:** maximum standard pain stimulation produces no motor response.

**NOTE:** Spinal cord injury may invalidate motor assessment in this form.